

REMARKS

Applicants submit this Reply in response to the non-final Office Action mailed March 31, 2010. By this Reply, Applicants have amended claims 17, 18, 20, 22-26, 34, 35, 37, and 39-43 and canceled claims 19 and 36 without prejudice or disclaimer. Thus, claims 17, 18, 20-35, and 37-48 are pending in this application, of which claims 17 and 34 are independent. No new matter has been added.

In the Office Action, the Examiner rejected claims 17-48 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent App. Pub. No. 2003/0025238 ("Ogawa") in view of at least one of U.S. Patent No. 2,732,102 ("Ekins"), U.S. Patent No. 3,526,929 ("Coupland"), U.S. Patent App. Pub. No. 2005/0017387 ("Harris"), and U.S. Patent No. 3,854,629 ("Blieberger"), and optionally further in view of at least one of WO 2004/022322 ("Caretta") and *Plastics Processing* from Kirk-Othermer Encyclopedia of Chemical Technology ("Plastics Processing").

Applicants respectfully traverse the pending claim rejection for at least the reasons discussed below.

Rejection Under 35 U.S.C. § 103(a)

The Examiner rejected claims 17-48 under 35 U.S.C. § 103(a) as being unpatentable over Ogawa in view of at least one of Ekins, Coupland, Harris, and Blieberger, and optionally further in view of at least one of Caretta and Plastics Processing. However, a *prima facie* case of obviousness, the requirements of which are discussed below, has not been established for each rejected claim.

To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must disclose all of the claim limitations, or the claim

rejection must explain why the differences between the prior art and the claim limitations would have been obvious to one of ordinary skill in the art. See M.P.E.P. § 2141.

A *prima facie* case of obviousness has not been established because, among other things, none of Ogawa, Ekins, Coupland, Harris, Blieberger, Caretta, or Plastics Processing, alone or in any combination, teaches or suggests every feature of Applicants' claims, as amended. Specifically, no reference cited by the Examiner teaches or suggests, as recited in amended independent claim 17:

stopping the feeding of the elongated element when formation of the tyre component is complete by bringing the gear pump to a standstill;

after bringing the gear pump to a standstill, maintaining the gear pump at a standstill for a first predetermined period of time; and

after maintaining the gear pump at a standstill for the first predetermined period of time, exerting a counter-pressure inside the delivery member by rotating the gear pump in a second direction, opposite the first direction, for a second predetermined period of time

Independent claim 34 has been amended to recite similar features.

As disclosed in Applicants' specification, it may be desirable to enhance the reproducibility of an extruded product between delivery cycles of a feed material. For example, the specification explains:

When extrusion is over, i.e. when a working cycle has been completed, both the residual pressure value and the relaxation time of such a pressure mainly depend on the viscoelastic properties of the elastomeric material and the geometry of the extrusion ducts. All these possible variables do not ensure a reproducibility of the extruded product and therefore a good repeatability of the delivery cycles, unless a sufficient time has elapsed after stopping of the delivery member, so as to reach an acceptable value of the residual pressure, in the order of 10-50 bars for example

[B]y imposing a predetermined pressure drop within a predetermined and very reduced period of time, . . . not only an

optimal reproducibility of the features of the extruded product can be achieved, but in addition this reproducibility can be obtained without substantially stopping delivery of the extruded product for a period longer than the time required for positioning a subsequent tyre in the same working station.

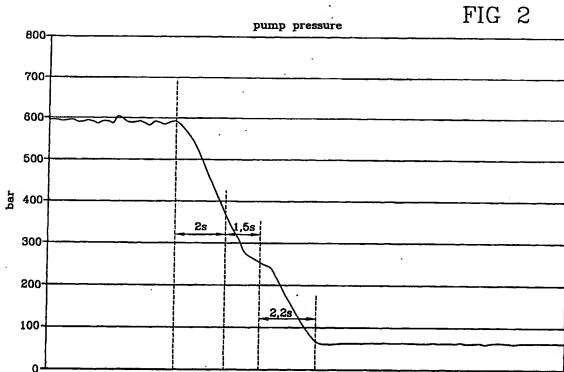
Specification at p. 5, l. 17-p. 6, l. 5.

Moreover, Applicants' specification describes, with respect to at least one exemplary embodiment, a method whereby reproducibility and repeatability can be achieved:

[I]n a preferred embodiment of the process of the invention, diagrammatically shown in Fig. 2, at the end of the feeding step, stopping of the gear pump takes place . . . preferably in a period of time included between about 1 second and about 3 seconds (2 seconds in Fig. 2); during the same time gap pressure downstream of the pump decreases from about 550-650 bars to about 150-400 bars. Subsequently, after a stop time . . . preferably of about 2 seconds (1.5 second in Fig. 2), during which time pressure downstream of the pump further decreases to about 150-200 bars, the pump is driven to rotate in the opposite direction relative to the feeding step over a period of time . . . preferably in the range of 2 to 3 seconds (2.2 seconds in Fig. 2). The residual pressure downstream of the gear pump will be included between about 10 to about 50 bars, and will preferably be of about 25 bars. Therefore the ideal conditions exist for a new feeding step after a period of time . . . preferably between about 5 seconds and about 8 seconds.

Specification at page 15, lines 12-35.

For further clarification, Applicants have reproduced Figure 2 of the specification below.



In the Office Action issued October 2, 2008, at page 2, the Examiner acknowledges that "Ogawa does not . . . describe exerting a counter pressure inside the delivery members after stopping feeding." Office Action at 2. However, the Examiner contends that Ekins, Coupland, Harris, and Blieberger each disclose the exertion of a counter-pressure "to help control flow of the material after stoppage." Id. at 3. However, no reference cited in the rejection statement describes a process "result[ing] in the elastomeric material inside the delivery member reaching a sufficient pressure to ensure reproducibility of the elongated element" that comprises the steps of: "stopping the feeding of the elongated element . . . by bringing the gear pump to a standstill; after bringing the gear pump to a standstill, maintaining the gear pump at a standstill for a

first predetermined period of time; and after maintaining the gear pump at a standstill for the first predetermined period of time, exerting a counter-pressure inside the delivery member by rotating the gear pump in a second direction, opposite the first direction, for a second predetermined period of time," as now recited in independent claim 17.

For example, in the Office Action, the Examiner asserts, "Coupland describes various measures [for preventing drool] including performing a limited reverse movement of the extruder to provide rearward pressure [(]esp. col. 2, lines 55-63)."
Office Action at 3. However, that reference discloses, "Perform[ing] a limited reverse action as soon as the forward extruding action has been completed whereby to provide rearward pressure relief." Coupland at col. 2, lines 57-59 (emphasis added). Coupland nowhere appears to teach or render obvious, "maintaining the gear pump at a standstill for a first predetermined period of time; and after maintaining the gear pump at a standstill for the first predetermined period of time, exerting a counter-pressure inside the delivery member by rotating the gear pump in a second direction, opposite the first direction, for a second predetermined period of time," as recited in Applicants' amended independent claims.

Similarly, the Examiner asserts that Blieberger teaches exerting a counter pressure after extrusion stoppage to prevent material drool. Office Action at 3. But that reference states, "In accordance with the present invention, this [drool] problem is avoided by providing an arrangement which, when the drive is shut off upon the piston reaching its expulsion position, will automatically retract the piston by a short distance in order to prevent the undesirable dripping." Blieberger at col. 2, lines 7-12 (emphasis added). Again, this reference fails to teach or render obvious, "maintaining the gear

pump at a standstill for a first predetermined period of time; and after maintaining the gear pump at a standstill for the first predetermined period of time, exerting a counter-pressure inside the delivery member by rotating the gear pump in a second direction, opposite the first direction, for a second predetermined period of time."

Furthermore, the Examiner's citation of Ekins, Harris, Caretta, and Plastics Processing fails to cure the deficiencies of Ogawa, Coupland, and Blieberger, as those references also fail to teach or render obvious, "maintaining the gear pump at a standstill for a first predetermined period of time; and after maintaining the gear pump at a standstill for the first predetermined period of time, exerting a counter-pressure inside the delivery member by rotating the gear pump in a second direction, opposite the first direction, for a second predetermined period of time," as recited in Applicants' amended claims.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of amended independent claims 17 and 34 under 35 U.S.C. § 103(a) as being unpatentable over Ogawa in combination with one or more of Ogawa, Ekins, Coupland, Harris, Blieberger, Caretta, and Plastics Processing.

Moreover, claims 18, 20-33, 35, and 37-48 each depend from one of amended independent claims 17 and 34 and, thus, contain all the elements and recitations thereof. As a result, dependent claims 18, 20-33, 35, and 37-48 are allowable at least due to their corresponding dependence from independent claims 17 and 34.

Claim Scope

It is to be understood that Applicants are in no way intending to limit the scope of the claims to any exemplary embodiments described in the specification or abstract

and/or shown in the drawings. Rather, Applicants believe that they are entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

CONCLUSION

In view of the foregoing, Applicants respectfully request reconsideration and reexamination of this application, and the timely allowance of the pending claims.

If the Examiner believes that a telephone conversation might advance prosecution of this application, the Examiner is cordially invited to call Applicants' undersigned attorney at (404) 653-6435.

Applicants respectfully note that the Office Action contains a number of assertions concerning the related art and the claims. Regardless of whether any of those assertions are addressed specifically herein, Applicants respectfully decline to automatically subscribe to them.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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